



Addressing Land and Water use Permitting under the MVRMA and its Operational Effectiveness

To: Standing Committee on Economic Development & Environment
June 2024

Thank you for inviting us to present to you again, this time on the regulatory environment.

Introductions of who we are.

Re: Your Directions

- Your directions to us:
 - *Committee would like to hear from the NWT & NU Chamber of Mines on its perspective and experience with the effectiveness and efficiency of the current regulatory framework for land and water use permitting, including which challenges or gaps may exist, capacity constraints for stakeholders and IGs, and areas of opportunity to inform Committee's review.*
- We also recommend you read the [NWT Environmental Audit 2020](#) and its [Technical Report](#)
 - Under MVRMA: Clause 148(3)(c) *An environmental audit shall include ... a review of the effectiveness of the regulation of uses of land and water ...*
 - Also, the freshly launched 2025 Audit is also tasked to review *c) the effectiveness of the regulatory system*



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I want to just remind us all of your request of us, which was to look at the effectiveness and efficiency of the current regulatory framework for land and water use permitting,

From a potential duplication perspective, we recommend you also look at the previous 2020 NWT Environmental Audit, required every 5 years by law under the MVRMA, which has the same requirements of your request of us.

And note too that the 2025 audit is now underway, with a similar goal.

We will touch on some of the information in the previous audit in our presentation.

Our Approach Today

- Context on why this work is important; how we got to Eyes Wide Open
- Details of our Land & Water Permitting Experiences
- Some considerations going forward
- The Critical Minerals Opportunity
- Discussion

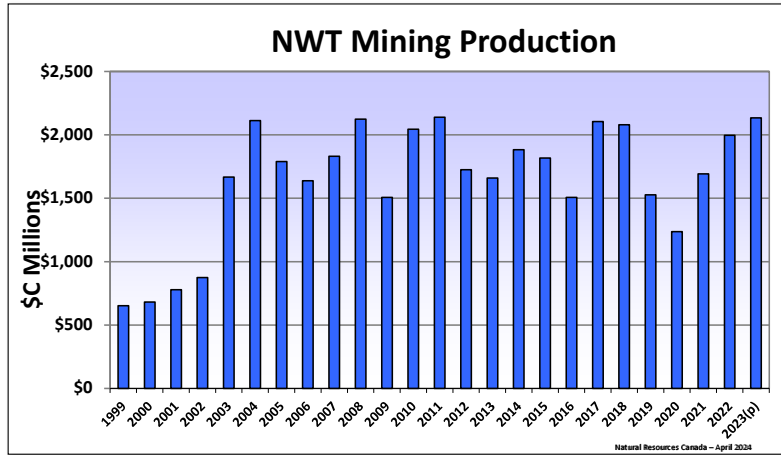


What we want to do today is:

- First, to provide you with some context on why your study is important and for that we will pick up on our last meeting with you on the economic analysis Eyes Wide Open, which links to this.
- Second, we will speak to some of the details of our industry's land water permitting experiences.
- We will offer some considerations going forward.
- And we will close with an important reference to the Critical Minerals Opportunities.
- Then we're open to discussion.

Why Sustaining your Industry is Important

NWT: World-class Diamond Production and Benefits



- SIGNIFICANT BENEFITS**
- 33,613 PY's Employment for NWT residents
 - \$8.16 Billion NWT Indigenous Business
 - \$10.14 Billion Other NWT Business
 - \$7.95 Billion Southern business
 - **TOTAL: \$26.26 Billion business**

NWT is the world's 3rd largest global diamond producer and 4th most valuable



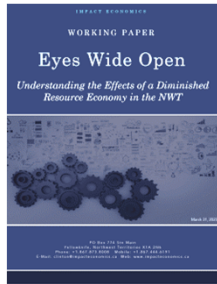
The regulatory system is critically important to support responsible mining, which is the result of successful exploration.

Thirty years ago, we had very healthy exploration which resulted in the diamond mine discoveries that have created these significant benefits.

Why Sustaining your Industry is Important: Averting this “The nature of the NWT economy is about to change in a profound way”

- Maturing diamond mining and O&G

- The economy will be smaller
- There will be fewer jobs
- There will be less disposable income
- Government will have less revenue
- There will be fewer people



[Impact Economics, 2024](#)

- Significant Economic Losses

Yellowknife

- 1,305 jobs
- \$173 million labour income
- 13.4% of income

Rest of NWT

- 575 jobs
- \$73 million labour income
- 7.9% of income

Quote: Anyone who considers themselves a leader, whether an elected leader or a leader through action, needs the information presented in this paper. This is a conversation that should have started the day Ekati mine produced its first diamond almost 25 years ago, but having not done so then is not reason to avoid it now.

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Unfortunately, as you learned from economist Graeme Clinton at our last meeting with you, we are in economic trouble now.

The reason we are in this situation is in no small part due to challenges created by our regulatory system, that negatively affected exploration.

Healthy, Successful Exploration is key to mining sustainability

But exploration is risky

- Not every project becomes a mine
- The odds are very much against exploration success, generally only 1:1,000 means 999 failures – most explorers will not be successful
- The Secret:
- Seek/support/incent strong exploration investment



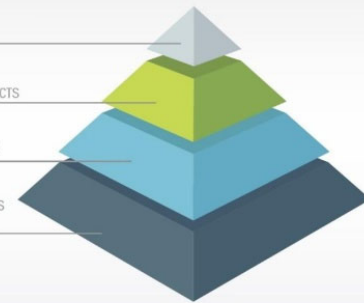
Only 1 in 1,000 exploration projects becomes a mine

ONE PRODUCING MINE

10 DEVELOPMENT PROJECTS

100 TARGETS FOR
ADVANCED EXPLORATION

FROM 500 – 1000 GRASS
ROOTS EXPLORATIONS



*Graphic courtesy Fraser Institute

Exploration is the life blood of mining. Without it, and without successful results, we cannot sustain a mining industry.

We need to keep finding new mines to replace those that eventually close.

However, exploration is extremely risky! It's a well-known statistic that only 1 in 1,000 projects becomes a mine.

Most explorers fail.

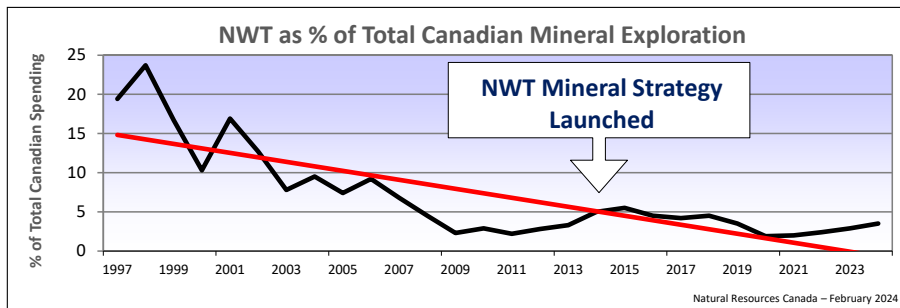
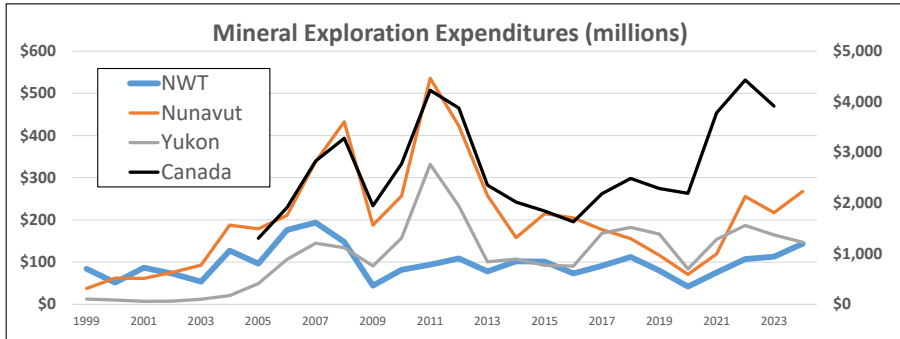
It's no joke, but Bingo is likely better odds.

But as our bingo friends know, the secret to improving your odds of winning is to play many cards.

We need healthy exploration, with many projects underway, with many investors attracted here to look for mines.

This is where the NWT has been having problems.

Challenge: Exploration to sustain mining continues to underperform



Money is a Coward

- Investment goes to less risky, less expensive, less complex, more attractive jurisdictions

Why NWT underperforms

- Weaker government tax incentives than provinces
- **Higher NWT costs due to overly complex regulatory processes**
- Shrinking access to mineral rich lands (conservation, unsettled land claims, etc.)
- Higher costs due to having Canada's largest and significant infrastructure deficit
- Aviation regulations now inflating costs, reducing results

Here are government statistics on exploration spending.

We have shown the three territories and Canada in the top chart.

You'll see that, compared to the others shown here, NWT exploration was essentially flat.

You'll also see in the bottom chart, how the NWT has continued to drop in its competitiveness in Canada.

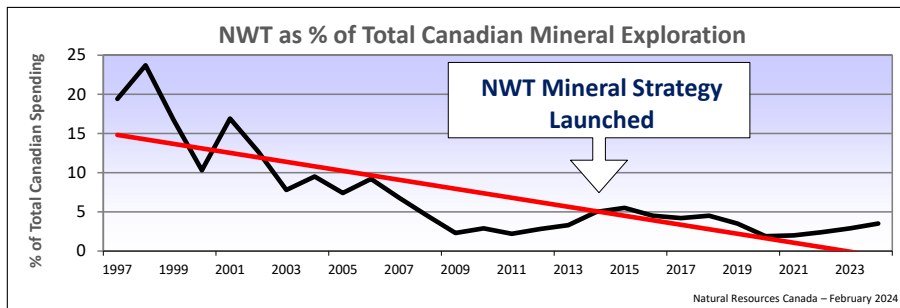
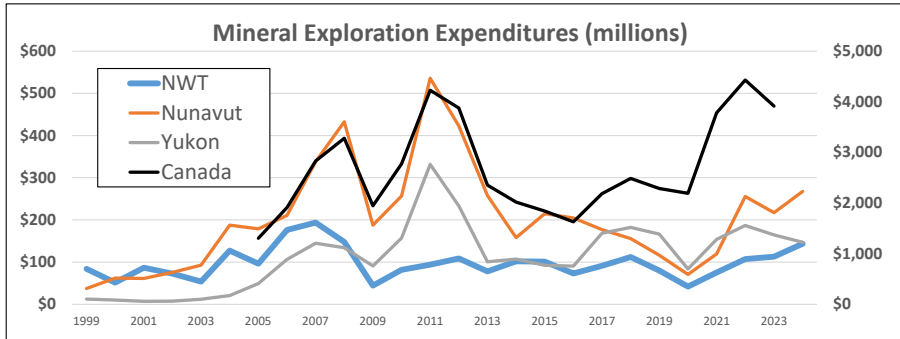
Even despite launching its first ever Mineral Strategy in 2014, the NWT was not able to change its trajectory.

Why did this happen?

In the broadest sense, you have to remember that money is a coward. Investment goes to less risky, less complex, less expensive, more attractive jurisdictions.

We've shown a few reasons why we underperform, but I won't go into all of those in detail here, as we will stick to the regulatory processes which was requested.

Challenge: Exploration to sustain mining continues to underperform

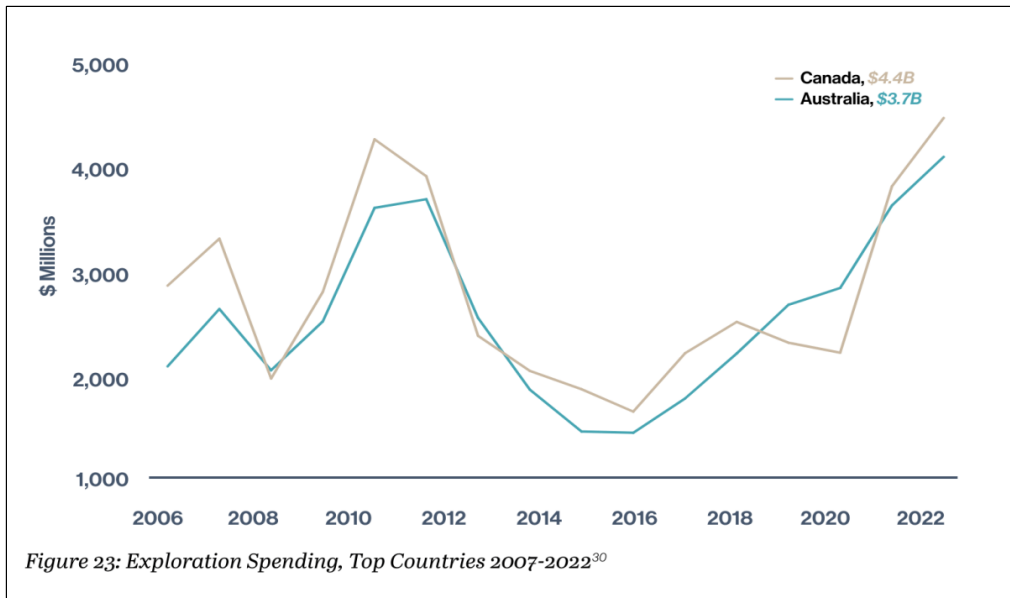


- NWT investment was out of step with Nunavut, Yukon, Canada, and the world
- Given our mineral potential is equally high, and we operated in the same marketplace, this means the NWT created this problem itself, internally.
- As a result, compared to Yukon & NU investment, **NWT missed out on \$1.4 Billion in exploration investment**

These charts tell us several important things.

- First, looking at the pattern, the NWT was out of step with Yukon, Nunavut, and Canada. And even with the world, if we showed you the global spending pattern.
- Given our mineral potential is equally as high as Nunavut and the Yukon, the NWT could have seen a similar and healthier pattern of investment.
- Because NWT didn't attract that pattern of investment, it actually missed out on well over a billion dollars in exploration spending.
- That would have bought a lot of bingo cards, and would, no doubt, have seen more mine discoveries.
- It was missed opportunity.
- This could have painted a very different picture than we find ourselves in today, with the Eyes Wide Open report.

Same pattern: Canada vs Australia spending (if interested)



• Source: [The Mining Story 2024, Canadian Mining Industry Facts and Figures](#)

If you're interested, here is Canadian exploration vs Australia, over a similar time period, and you can see the pattern is also in Australia, our biggest competitor.

Unfortunately, it's not getting better

Fraser Institute Survey of Mining Companies 2023 (May 14, 2024)

- NWT continues to languish in exploration attractiveness, quote:
 - *Some Canadian jurisdictions fail to capitalize on their strong mineral potential due to a lack of a solid policy environment. ... the NWT, despite being among the top ten most attractive jurisdictions for mineral endowment, rank 45th, when considering policy factors alone.*
 - NWT's mineral potential index ranks it very high at 5th in World but ...
 - scores second lowest in Canada in terms of policy factors, at 45 out of 86
- NWT's policy environment is damaging is Investment Attractiveness (#24)
 - *The governments in NWT, alongside the federal government, impose regulatory challenges and high costs, prompting companies to explore mining opportunities in jurisdictions beyond Canada.*
 - ... A consulting company, Senior management



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Unfortunately, this situation hasn't magically healed itself, and we aren't out of the woods yet.

The most recent Fraser Institute international Survey of Mining Companies reveals that the NWT is still not healthy.

We'll leave it to you to read more in the report linked here if you like.

I'll just highlight one bullet as it is important for our final slide. That is that: NWT's mineral potential put it very high at 5th in the World.

Some actions that made the NWT less attractive

- These events increased investment uncertainty, reduced land access, added costs
 - **2000 – ?**: Unsettled land claims affect land access, create uncertainty
 - **2000-2014**: NWT Protected Areas Strategy – \$25 million campaign withdraws 60,000 sq.km.
 - **2007**: Akaitcho “interim” withdrawal land claim: **62,000 km²**
 - **2007**: Thaidene Nene interim land withdrawal: **33,690 km²**
 - **2007**: Akaitcho blocks **18,000 km²** Upper Thelon exploration, companies lost \$25 million – leave
 - **2008**: Akaitcho demand unrealistic/illegal requirement for onerous Exploration Agreements
 - **2009**: Akaitcho challenges approval of North Arrow Minerals grassroots Li-project – cancelled
 - **2010**: Akaitcho ‘public concern’ triggers EA for TNR Gold grassroots project – they leave
 - **2015**: ‘Public concern’ triggers EA for minuscule grassroots sand exploration – halted
 - **2016**: UNESCO biosphere reserve removes over **93,000 km²** around Great Bear Lake
 - **2014-2024**: Policy creep through regulatory boards – bathymetry, water use, Type A requirements for Type B work, inspector powers, etc.
 - **2020**: NWT Environmental Audit confirms regulatory/policy issues



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What caused this, you ask?

Investor confidence has fallen for a variety of reasons and a number of events, shown here.

We will focus on the two at the bottom, for they are the focus of your work here today.

They are the actions of the regulatory Boards and the environmental audit’s role in identifying this.

A key finding of the NWT Environmental Audit 2020

- A key quote in the *NWT Environmental Audit 2020* recognized Industry concerns:
 - *“Despite the efforts of LWBs, small exploration companies continue both to struggle with the application process and to meet its requirements. If allowed to persist, this disconnect between industry and regulators will continue to affect the level of exploration activity in the territory which, in turn, will affect the NWT’s socio-economic environment.”*
- In essence, the LWB’s have negatively affected NWT’s socio-economic environment
- This contributed to the “Eyes Wide Open’s” negative economic situation



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Investigations for the Audit in 2019 led to a key finding that was published in the 2020 NWT Environmental Audit:

“Despite the efforts of LWBs, small exploration companies continue both to struggle with the application process and to meet its requirements. If allowed to persist, this disconnect between industry and regulators will continue to affect the level of exploration activity in the territory which, in turn, will affect the NWT’s socio-economic environment.”

This linked the actions of the land and water boards to negative effects on the NWT’s economics.

Since exploration was negatively affected, our ability to find new mines was hampered, and thus we are in the Eyes Wide Open situation.

Result: *Mackenzie Valley Operational Dialogue* created

- MVOD created in 2020 in response to concerns raised by industry but with a mandate to only seek operational improvements
 - Parties meet (outside of specific projects) to provide updates on regulatory initiatives, share knowledge, discuss challenges, and collaborate on work plans
 - Focuses on shared objectives and goals of all participants using a dialogue-first approach to develop solutions together to better serve all
 - Goal: Maintain a regulatory regime in the Mackenzie Valley that is understood, trusted, effective, and efficient for all involved
- In 2023, under umbrella of Canada’s Critical Minerals Strategy, MVOD was sanctioned to seek regulatory improvements too



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As a result of the Audit and industry concerns, government created a process called the *Mackenzie Valley Operational Dialogue*.

Its name describes that it was mandated to only look at operational improvements, ie, no discussion of regulations or legislation.

This changed finally in 2023, due to the Federal Government’s recognition under the Critical Minerals Strategy that Canada’s regulatory environment needs improvement if we are to increase production of critical minerals to address climate change.

Regulatory improvements are a goal now from coast to coast.

Some of Industry's concerns

- Board / Government Policy creep over many years
 - Grassroots exploration treated as Advanced Exploration
 - Water use definition overkill (Circulating water, ice pads, ice roads)
 - Type B water licenses treated as Type A – unnecessary cost and time
 - Advanced exploration project treated as mining & milling (eg, KDI)
 - Inspectors' powers diminished – Created bathymetry consequence



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Here are a list of some of our industry concerns that we identified through the Audit, and the MVOD process.

We'll speak to them briefly in the following slides.

Early-stage, “grassroots” exploration is NOT Advanced

- Exploration Goal: To find a mineral deposit (not a mine, yet)
 - Very small footprint, over large area
 - Small camps, perhaps ~10-30 workers
 - Mapping; Sampling by prospecting, channel sampling, trenching
 - Geophysical and Geochemical surveys
 - Diamond drilling (note diamond drilling is not just for diamonds 😊)
 - Low water use



Through policy creep, we saw many grassroots exploration projects (which are small) being treated by regulators as Advanced Projects, which are much larger.

This slide explains the very small nature of early-stage exploration.

Advanced Exploration

- Exploration goal: to determine shape, size, tonnage, quality of the mineral deposit(s) discovered in early-stage exploration
 - Larger camps for larger workforce (~50-200)
 - More intensive work: more/larger drilling, perhaps even underground mining to remove tonnages of rock samples, more equipment
 - Smaller footprint but larger water use



Advanced exploration begins once you have found a mineral deposit and are investigating its potential to become a mine.

That sees much larger camps, with larger work focused in a smaller area.

If you're interested, that's Diavik to the left in about 1996 when they went underground to mine a bulk sample for testing purposes. This was before enough work had been done to determine if it could become a mine.

(On the right is the Goose project just across the NU boundary NE of Yellowknife. A mine is now being constructed there).

Advanced Exploration is not Mining



- Example Kennady Diamonds



Another example of an advanced project is one I (Gary) know intimately.

This is the Kennady Diamonds project, a stone's throw from the Gahcho Kué mine.

Explain

Water Use

- Interpretation that recirculation from a water source was a 'use' came around 2018, with the first issuance of the water use bulletin from the LWBs.
- Consequence: it pushed some projects to either get a Type B Water License or reduce drilling (down to as little as one drill to stay under <100 m³).
 - Note: one drill only uses about 30-40 m³ of water. The remainder of use went to recirculation
- Type A licenses vs Type B – much more costly, comprehensive, time consuming
 - Overkill to require a Type A where Type B is necessary



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A big area where we saw the regulators make changes was in water use.

The change in their definition pushed small projects up into the realm of Type B water licenses, and even in some cases Type A.

Gary explain this.

Action required

- In May 2024, the Land and Water Boards of the Mackenzie Valley collectively recommended to GNWT and CIRNAC/Northern Affairs Ministers:
 - The Regulations are outdated and a source of uncertainty in the regulatory process
 - Focused amendments to the Regulations should be prioritized over updates to the Waters Act
 - Many proponents and some co-management partners support focused amendments to the Regulations
 - A discussion between co-management partners needs to be reinitiated
- The Chamber of Mines has agreed with these recommendations



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Just a few weeks ago, in late May, the four Land & Water Boards of the Mackenzie Valley collectively submitted these recommendations to both the Minister of Northern Affairs and the GNWT's Minister of Environment and Climate Change.

In essence, the recommendations are to “surgically” make some changes to the waters regulations to address how exploration is treated. This isn't an overhaul of the regulations, nor do the Boards recommend touching the act, both exercises that will take a very long time. This is a time for quick action.

(Note: These are consistent with Canada's Northern Regulatory Improvement Initiative and other commitments to improve the regulatory system in Canada to seize critical mineral and other energy transition opportunities.)

Considerations Moving Forward

- Regulators need to pay more attention to socio-economic effects
 - The MVRMA is unique legislation requiring not just a focus on biophysical effects but on economic well-being.
 - Economic benefits and well-being of residents seem to have been lost
- Listen to industry – we are here at governments’ request to help
 - We flagged concerns 10+ years ago – action was far too slow
- Move more quickly on Audits
 - The 2025 Audit is now underway, yet recommendations of the previous Audit are still outstanding



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We offer a few observations and considerations for governments and regulators going forward.

The first is that regulators need to be assessing economic benefits, not just biophysical. The MVRMA is unique Canadian legislation, based in land claims, but also requiring regulatory boards to be seeking economic well-being. The audit flagged they have not done that well.

The second is meant to be respectful. Industry is here at the invitation of governments to help them find mines to generate benefits. We are, in many ways, your expert contractor to do this. We have many experienced professionals who have expertise from working all over the world. We experience issues first hand, and can relay them to governments for assistance.

The third, it would be helpful to move more quickly on addressing problems, particularly when the related to the largest private sector contributor to the economy. The concerns of the 2020 Audit are still there, and yet we are already now in the 2025 Audit process. That’s just too long.

The Critical Minerals Opportunity

- Critically important globally to address climate change
- We are facing the biggest transition since the horse to automobile
- Demand for minerals critical to this transition are significant
- China has established a concerning dominance
- Canada and its allies have created strategies and are committed to significantly boosting critical mineral exploration, development, production and use
- The NWT, with its significant untapped mineral potential, has unprecedented opportunities available to it
- Your work can help seize these opportunities



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To close, I want to leave one more important message around the importance of the work you are doing to seek regulatory improvement.

We are entering into the the biggest transition in technology and energy use since we switched from the horse to the automobile.

It's a global imperative to transition energy from fossil fuels if we are to successfully address climate change.

Mining is a huge part of this.

China was smart and acquired critical mineral supplies early, and still continues to. They wanted, and have now established, market dominance.

This is a concern. All of the western world have developed aggressive strategies to address this.

The NWT has some of the highest mineral potential in the world, (as identified in the Fraser Institute Survey). The NWT is now presented with huge opportunities.

This could be timely given the concerns of Eyes Wide Open.

Your work to improve the regulatory environment can help seize these opportunities.

Discussion

- Open for discussion



Thanks very much, and we are open to questions and discussion.